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Edmondson et al.

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(54) **SURGICAL RETRACTOR**

(56) **References Cited**

(71) Applicant: **Brigham Young University**, Provo, UT (US)

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(72) Inventors: **Bryce Edmondson**, Provo, UT (US);
Quentin Allen, Lindon, UT (US);
Michael McCain, Provo, UT (US);
John J. Pierce, Provo, UT (US); **Terri Bateman**, American Fork, UT (US);
Larry Howell, Orem, UT (US)

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(73) Assignee: **Brigham Young University**, Provo, UT (US)

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 668 days.

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Primary Examiner — Larry E Waggle, Jr.

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(74) *Attorney, Agent, or Firm* — Sean D. Detweiler, Esq.;
Morse, Barnes-Brown & Pendleton, P.C.

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See application file for complete search history.

(57) **ABSTRACT**

A surgical retractor device for retaining and/or moving internal organs during minimally invasive or laparoscopic surgery is provided. The surgical retractor can be a single continuous structure that includes a shaft. The shaft can branch into a first elongate finger with a first distal end opposite the shaft and a second elongate finger with a second distal end opposite the shaft. The retractor can further include a resilient lattice structure disposed between the first elongate finger and the second elongate finger. The retractor can have an expanded configuration and a collapsed configuration based on relative distance between the first distal end and the second distal end. When the retractor is in the collapsed configuration, spring force energy can be stored in the resilient lattice structure.

21 Claims, 7 Drawing Sheets

